

ACTIVE FLOW MANAGEMENT WITH HYSTERESIS

ABSTRACT OF THE DISCLOSURE

The present invention provides for a computer network method and system that applies “hysteresis” to an active queue management algorithm. If a queue is at a level
5 below a certain low threshold and a burst of packets arrives at a network node, then the probability of dropping the initial packets in the burst is recalculated, but the packets are not dropped. However, if the queue level crosses beyond a hysteresis threshold, then packets are discarded pursuant to a drop probability.

Also, according to the present invention, queue level may be decreased until it
10 becomes less than the hysteresis threshold, with packets dropped per the drop probability until the queue level decreases to at least a low threshold. In one embodiment, an adaptive algorithm is also provided to adjust the transmit probability for each flow together with hysteresis to increase the packet transmit rates to absorb bursty traffic.